

FURTHER ADDITIONS TO THE LIST OF BIRDS VICTIMIZED
BY THE COWBIRDBY HERBERT FRIEDMANN¹

In a previous paper² I brought up to date (1931) what was known of the various birds parasitized by the cowbirds, as first presented in my book ("The Cowbirds", 1929). Since then I have gathered together a large amount of new data, based on unpublished material, chiefly in private collections. The following gentlemen have placed me deeply in their debt for the records they have generously sent to me:

Messrs. C. G. Abbott, San Diego, California; M. C. Badger, Santa Paula, California; Griffing Bancroft, San Diego, California; F. Bradshaw, Regina, Saskatchewan; J. C. Braly, Portland, Oregon; N. K. Carpenter, San Diego, California; H. W. Carriger, Oakland, California; B. W. Cartwright, Winnipeg, Manitoba; C. Cottam, Washington, D. C.; E. J. Court, Washington, D. C.; S. J. Darcus, Penticton, British Columbia; C. E. Doe, Gainesville, Florida; C. L. Field, National City, California; A. D. Henderson, Belvedere, Alberta; A. M. Ingersoll, San Diego, California; Guy Love, Santee, California; A. E. Price, Grant Park, Illinois; L. B. Potter, East End, Saskatchewan; T. E. Randall, Athabasca, Alberta; W. Rowan, Edmonton, Alberta; W. B. Sampson, Piedmont, California; M. Schönwetter, Gotha, Germany; E. E. Sechrist, San Diego, California; C. S. Sharp, Escondido, California; E. M. Tait, Summerland, British Columbia; R. W. Tufts, Ottawa, Ontario; Neal Weber, Grand Forks, North Dakota; L. R. Wolfe, Chicago, Illinois; H. Woodward, San Diego, California; and J. T. Wright, present whereabouts unknown (collecting in Mexico).

A relatively small number of new or interesting records have appeared in publications since January, 1931, and a few have been found in journals not previously available for search. All these have been included and are summarized here.

For convenience in publication, now so restricted everywhere, I have had to limit this paper to the North American species (*Molothrus ater*) alone. It is hoped that similar notes on the other cowbirds may find publication elsewhere.

The following are additions to the list of known victims of the North American Cowbird (all races). They bring the total of host species up to 238, an increase of 29.

¹Published by permission of the Secretary of the Smithsonian Institution.

²Auk, 1931, pp. 52-65.

- Tyrannus vociferans* Swainson. Cassin's Kingbird.
Empidonax flaviventris (Baird and Baird). Yellow-bellied Flycatcher.
Nuttallornis mesoleucus (Lichtenstein). Olive-sided Flycatcher.
Psaltriparus minimus minimus (Townsend). Coast Bush-tit.
Toxostoma bendirei (Coues). Bendire's Thrasher.
Turdus migratorius achrusterus (Batchelder). Southern Robin.
Sturnus vulgaris vulgaris Linnaeus. Starling.
Vireo belli arizonae Ridgway. Arizona Vireo.
Vireo solitarius cassini Xantus. Cassin's Vireo.
Vireo philadelphicus (Cassin). Philadelphia Vireo.
Dendroica auduboni auduboni (Townsend). Audubon's Warbler.
Dendroica palmarum palmarum (Gmelin). Western Palm Warbler.
Geothlypis trichas brachydactyla (Swainson). Northern Yellowthroat.
Agelaius phoeniceus arctolegus Oberholser. Giant Red-wing.
Agelaius phoeniceus californicus Nelson. Bicolored Red-wing.
Euphagus carolinus (Müller). Rusty Blackbird.
Piranga ludoviciana (Wilson). Western Tanager.
Pyrrhuloxia sinuata sinuata (Bonaparte). Arizona Pyrrhuloxia.
Guiraca caerulea interfusa Dwight and Griscom. Western Blue Grosbeak.
Guiraca caerulea salicaria Grinnell. California Blue Grosbeak.
Passerina ciris pallidior Mearns. Texas Painted Bunting.
Spinus tristis pallidus Mearns. Pale Goldfinch.
Pipilo maculatus curtatus Grinnell. Nevada Towhee.
Pipilo fuscus mesoleucus Baird. Cañon Towhee.
Passerculus sandwichensis nevadensis Grinnell. Nevada Savannah Sparrow.
Melospiza melodia atlantica Todd. Atlantic Song Sparrow.
Melospiza melodia beata Bangs. Mississippi Song Sparrow.
Melospiza melodia fisherella Oberholser. Modoc Song Sparrow.
Melospiza melodia morphna Oberholser. Rusty Song Sparrow.
Melospiza melodia santaecrucis Grinnell. Santa Cruz Song Sparrow.

From the previous list should be deleted *Guiraca caerulea lazula*, which is now restricted to southern Mexico, and the records of which must now be referred to *G. c. interfusa*.

Several of these new host records are due to the recognition of more subspecies in the Fourth Edition of the A. O. U. Check-List, but the majority are new discoveries.

In addition to these birds, a number of forms previously listed as victims of one race of the cowbird, have since been found to be parasitized by another race as well. Therefore, if we list the victims according to the subspecies of the cowbird, we get the following additions (including those mentioned above) :

- a. *Molothrus ater ater* (Boddaert). Eastern Cowbird.
Salpinctes obsoletus obsoletus (Say). Rock Wren.
Turdus migratorius achrusterus (Batchelder). Southern Robin.
Hylocichla fuscescens salicicola Ridgway. Willow Thrush.
Sturnus vulgaris vulgaris (Linnaeus). Starling.
Geothlypis trichas brachydactyla (Swainson). Northern Yellowthroat.
Icteria virens longicauda Lawrence. Long-tailed Chat.
Hedymeles melanocephalus papago Oberholser. Rocky Mountain Grosbeak.
Oberholseria chlorura (Audubon). Green-tailed Towhee.
Pipilo fuscus mesoleucus Baird. Cañon Towhee.
Passerherbulus caudacutus (Latham). Leconte's Sparrow.
Chondestes grammacus strigatus Swainson. Western Lark Sparrow.
Melospiza lincolni lincolni (Audubon). Lincoln's Sparrow.
Melospiza melodia atlantica Todd. Atlantic Song Sparrow.
Melospiza melodia beata Bangs. Mississippi Song Sparrow.

This brings the list of hosts of the Eastern Cowbird from 127 up to 141 forms.

- b. *Molothrus ater artemisiae* Grinnell. Nevada Cowbird.
Tyrannus tyrannus (Linnaeus). Nevada Cowbird.
Sayornis phoebe (Latham). Eastern Phoebe.
Empidonax flaviventris (Baird and Baird). Yellow-bellied Flycatcher.
Empidonax trailli trailli (Audubon). Alder Flycatcher.
Myiochanes richardsoni richardsoni (Swainson). Western Wood Pewee.
Nuttallornis mesoleucus (Lichtenstein). Olive-sided Flycatcher.
Corthylio calendula calendula (Linnaeus). Eastern Ruby-crowned Kinglet.
Vireo olivaceus (Linnaeus). Red-eyed Vireo.
Vireo philadelphicus (Cassin). Philadelphia Vireo.
Vireo gilvus swainsoni Baird. Western Warbling Vireo.
Mniotilta varia (Linnaeus). Black and White Warbler.
Vermivora peregrina (Wilson). Tennessee Warbler.

Dendroica auduboni auduboni (Townsend). Audubon's Warbler.
Dendroica palmarum palmarum (Gmelin). Western Palm Warbler.
Setophaga ruticilla (Linnaeus). Redstart.
Piranga ludoviciana (Wilson). Western Tanager.
Agelaius phoeniceus arctolegus Oberholser. Giant Red-wing.
Icterus galbula (Linnaeus). Baltimore Oriole.
Euphagus carolinus (Müller). Rusty Blackbird.
Carpodacus purpureus purpureus (Gmelin). Eastern Purple Finch.
Spinus tristis pallidus Mearns. Pale Goldfinch.
Pipilo maculatus curtatus Grinnell. Nevada Towhee.
Passerculus sandwichensis nevadensis Grinnell. Nevada Savannah Sparrow.
Junco hyemalis hyemalis (Linnaeus). Slate-colored Junco.
Zonotrichia albicollis (Gmelin). White-throated Sparrow.
Melospiza melodia fisherella Oberholser. Modoc Song Sparrow.
Melospiza melodia morphna Oberholser. Rusty Song Sparrow.

This increases the list of victims of the Nevada Cowbird by 27 forms to a total of 82 in all.

c. *Molothrus ater obscurus* (Gmelin). Dwarf Cowbird.

Although the last edition of the A. O. U. Check-List recognizes the California Cowbird (*Molothrus ater californicus* Dickey and van Rossem) as valid, I still adhere to my former opinion that it is too poorly characterized a race to be worthy of nomenclatural distinction. I still consider it the same as the Dwarf Cowbird (*M. a. obscurus*) and so in this paper it is merged with the latter race.

Tyrannus vociferans Swainson. Cassin's Kingbird.
Psaltriparus minimus minimus (Townsend). Coast Bush-tit.
Toxostoma bendirei (Coues). Bendire's Thrasher.
Vireo belli arizonae Ridgway. Arizona Vireo.
Vireo solitarius cassini Xantus. Cassin's Vireo.
Compsothlypis americana americana (Linnaeus). Parula Warbler.
Agelaius phoeniceus californicus Nelson. Bicolored Red-wing.
Pyrrhuloxia sinuata sinuata (Bonaparte). Arizona Pyrrhuloxia.
Guiraca caerulea interfusa Dwight and Griscom. Western Blue Grosbeak.
Guiraca caerulea salicaria Grinnell. California Blue Grosbeak.
Passerina ciris pallidior Mearns. Texas Painted Bunting.
Carpodacus mexicanus frontalis (Say). House Finch.
Melospiza melodia santaecrucis Grinnell. Santa Cruz Song Sparrow.

The victims of the Dwarf Cowbird now total 87 forms (an increase of 13).

In the following annotated list are included only forms, the status of which, with respect to the cowbirds, has been altered by recent discoveries.

Coccyzus americanus americanus (Linnaeus). YELLOW-BILLED CUCKOO. The single record, still unique, was known to me only by virtue of the fact that Bendire included this cuckoo in his list of victims of the cowbird. In my book (p. 206) I wrote that inasmuch as no parasitized set of Yellow-billed Cuckoo's eggs was ever in the U. S. National Museum, it was probable that Bendire got his record from a correspondent. This I have been able to verify recently. Among some of Bendire's papers I found a letter from W. E. Loucks of Peoria, Illinois, in which Loucks writes that he found the nest in question. Although he does not say where or when he found it, it is likely that the locality was somewhere near Peoria where most of his field work was done.

Tyrannus tyrannus (Linnaeus). EASTERN KINGBIRD. The parasitized nest of this species from near Wahpeton, North Dakota, mentioned in my book (p. 207) involves the Nevada Cowbird, not the eastern race as there intimated. To the very few records of parasitism of the kingbird may be added five more, a set of three eggs of the kingbird and one of the Eastern Cowbird, found at Glocester, Rhode Island, June 12, 1919, and now in the C. E. Doe collection in the Florida State Museum. Mr. T. E. Randall found a parasitized nest in Alberta and Mr. S. J. Darcus a similar nest in Saskatchewan (Nevada Cowbird involved). Mr. A. M. Ingersoll found a parasitized nest at Ithaca, New York. Mr. Guy Love found a victimized nest in Decatur County, Kansas.

Tyrannus vociferans Swainson. CASSIN'S KINGBIRD. A nest with three eggs of the Cassin's Kingbird and two of the Dwarf Cowbird, found in the Santa Rita Mountains, Arizona, June 29, 1884, is now in the C. E. Doe collection in the Florida State Museum. This is the only record I know of for this species.

Myiarchus crinitus boreus Bangs. NORTHERN CRESTED FLY-CATCHER. Mr. E. J. Court tells me that he once found a cowbird's egg in a nest of this species in Charles County, Maryland. Previously I knew of but one such instance—in Massachusetts.

Sayornis phoebe (Latham). EASTERN PHOEBE. Previously recorded as an abundantly victimized host of the Eastern Cowbird, it

is now known to act in this capacity for the Nevada Cowbird as well. Mr. T. E. Randall found two parasitized nests in Alberta.

Empidonax flaviventris (Baird and Baird). YELLOW-BELLIED FLYCATCHER. Three records. Mr. T. E. Randall found two parasitized nests and Mr. A. D. Henderson found one, all in Alberta.

Empidonax trailli trailli (Audubon). ALDER FLYCATCHER. The Alder Flycatcher is a new host for the Nevada Cowbird. Mr. T. E. Randall found two victimized nests in Alberta; Mr. E. M. Tait found two more near Trout Creek Point, British Columbia. The Alder Flycatcher is so rarely recorded as a molothrine victim that the following instances may be of interest. Mr. S. J. Darcus found a nest with four eggs of the flycatcher and one of the Eastern Cowbird, at Fredericton, New Brunswick, June 14, 1912. Mr. A. M. Ingersoll writes me that he once found a nest of this flycatcher with a cowbird's egg in it.

Empidonax trailli brewsteri Oberholser. LITTLE FLYCATCHER. Mr. E. E. Sechrist found two parasitized nests near San Diego, California; Mr. C. H. Woodward found two others in Mission Valley, San Diego County.

Empidonax minimus (Baird and Baird). LEAST FLYCATCHER. Racey (*Murrelet*, xi, 1930, p. 70) found a nest of the Least Flycatcher with three eggs of the owner and one of the Nevada Cowbird at Peace River Block, British Columbia. The relatively few previous records of parasitism on this species were all from the territory of the United States. Mr. T. E. Randall found a parasitized nest in Alberta.

Myiochanes richardsoni richardsoni (Swainson). WESTERN WOOD PEWEE. Not previously recorded as a host of the Nevada Cowbird. Mr. T. E. Randall found four victimized nests in Alberta, and Mr. E. M. Tait found one at Trout Creek Point, British Columbia.

Nuttallornis mesoleucus (Lichtenstein). OLIVE-SIDED FLYCATCHER. One record. Mr. A. D. Henderson writes me that he collected a nest of this bird containing three eggs of the flycatcher and one of the Nevada Cowbird, on June 27, 1925, near Belvedere, Alberta.

Pyrocephalus rubinus mexicanus Sclater. VERMILION FLYCATCHER. To the few previously recorded cases may be added two others: 1. A parasitized nest found by Mr. A. M. Ingersoll at Phoenix, Arizona. This nest contained an addled egg of the Dwarf Cowbird and some young flycatchers. 2. A nest found near Tucson, Arizona, by Mr. N. K. Carpenter.

Otocoris alpestris leucolaema (Coues). DESERT HORNED LARK. To the single previous record may be added two more, a parasitized nest found in Alberta by Mr. T. E. Randall, and another, with three

eggs of the lark and one of the Nevada Cowbird, found at Cypress Hills, Saskatchewan, June 8, 1920, by Mr. S. J. Darcus.

Otocoris alpestris praticola (Henshaw). PRAIRIE HORNED LARK. I had previously considered this bird as a relatively uncommon host of the cowbird. However, Mr. A. E. Preece, of Grant Park, Illinois, writes me that it is commonly parasitized. "Nests made in a hill of corn at any time in June are frequently found containing cowbird's eggs. I have found as many as four cowbirds in one nest." Piekwell (Trans. Acad. Sci., St. Louis, vol. 27, 1931, pp. 106-109) has given some very valuable data on the Prairie Horned Lark as a molothrine host. Out of thirty-two nests found by him only one was parasitized. His account does not include any records of other observers.

Auriparus flaviceps flaviceps (Sundevall). ARIZONA VERDIN. To the few recorded instances of this bird acting as a molothrine host we may add that Mr. E. J. Court found the Dwarf Cowbird parasitizing the verdin in southern Texas.

Psaltriparus minimus minimus (Townsend). COAST BUSH-TIT. One record. Mr. H. W. Carriger found a parasitized nest of this bird at Irvington, Alameda County, California, May 15, 1932. It contained eight eggs of the bush-tit and one of the Dwarf Cowbird. There were minute punctures in two of the bush-tit's eggs.

Psaltriparus minimus californicus Ridgway. CALIFORNIA BUSH-TIT. A second record has come to my notice. Ashworth and Thompson (*Oologist*, vol. 47, 1930, pp. 122-124) report an egg of the Dwarf Cowbird from a nest of this bird in Ventura County, California, March 29.

Sitta carolinensis carolinensis Latham. WHITE-BREADED NUTHATCH. I knew of three instances before; now another one has come to my attention, a set of six eggs of the nuthatch and one of the Eastern Cowbird, collected May 5, 1912, at State College, Pennsylvania, by R. C. Harlow, and now in the collection of Mr. H. W. Carriger. Thus, two of the four records come from State College, both found by Mr. Harlow.

Chamaea fasciata henshawi Ridgway. PALLID WREN-TIT. A third record has recently come to my attention, a parasitized nest found in San Diego County, California, by Mr. N. K. Carpenter.

Thryothorus ludovicianus ludovicianus (Latham). CAROLINA WREN. In view of the paucity of records of this bird as a molothrine victim, it is of interest to note that in Oklahoma it may be more commonly parasitized than elsewhere. Mrs. Nee (*Birds of Oklahoma*, revised edition, 1931, p. 136) lists four parasitized nests from Copan

and Vinita, these four comprising one-fourth of the nests found there.

Salpinctes obsoletus obsoletus (Say). ROCK WREN. To the single previous record may be added the following:

Captain L. R. Wolfe writes me that he collected a set of four eggs of the wren and two of the cowbird in Decatur County, Kansas, June 17, 1914, and now in his collection. Herr Schönwetter also informs me that he has a set of three eggs of the wren and one of the cowbird, taken in Kansas, May 12, 1913. Mr. Guy Love informs me that he collected twelve parasitized sets of this wren in Decatur County, Kansas, so it appears that the species is frequently victimized there. All these cases refer to *M. a. ater* and are the first ones for that race of the cowbird.

Mimus polyglottos polyglottos (Linnaeus). EASTERN MOCKINGBIRD. To the one record previously known to me (from Arkansas) may be added another. Mr. E. J. Court informs me that he found an egg of the Eastern Cowbird in a nest of the mockingbird in St. Mary's County, Maryland.

Mimus polyglottos leucopterus (Vigors). WESTERN MOCKINGBIRD. To the little previously recorded in my book (p. 252) of this host, may be added the following:

Oldright (The Ornith. and Ool. Semi-Annual, vol. 2, No. 2, July, 1890, pp. 33, 34) lists a set of three eggs of the mockingbird and one of the Dwarf Cowbird and writes that, "... Dwarf Cowbirds' eggs . . . are but seldom found in the 'Mocker's' nest, but this year several were found." Mr. E. J. Court found this bird parasitized by the Dwarf Cowbird near San Antonio, Texas.

Toxostoma rufum (Linnaeus). BROWN THRASHER. To the seven definite records may be added three more, all from Oklahoma—a new region in this connection. Mrs. Nice (Birds of Oklahoma, revised edition, 1931, p. 140) records them as follows: A nest with four eggs of the thrasher and one of the cowbird, from Copan, May 9; a set of five eggs of the thrasher and one of the cowbird, from Tulsa; a nest with three eggs of the thrasher and one of the cowbird, also from Tulsa.

Toxostoma bendirei (Coues). BENDIRE'S THRASHER. One record. A set of three eggs of the thrasher and one of the Dwarf Cowbird, collected by E. A. Mearns near Red Rock, Arizona, April 3, 1885, now in the U. S. National Museum.

Toxostoma curvirostre oberholseri Law. BROWNSVILLE THRASHER. The single record of this species previously known must be referred to this recently described race.

Turdus migratorius achrusterus (Batchelder). SOUTHERN ROBIN. Two records: Kirkwood (Trans. Maryland Acad. Sci., vol. 1, 1895, p. 322) found a nest of the Southern Robin in Maryland, on May 21, 1893, containing two eggs of the Eastern Cowbird in addition to three of the robin. Neff (Oologist, vol. 43, 1926, p. 149-151) found a parasitized nest in the Ozark Mountains, Missouri.

Hylocichla fuscescens salicicola Ridgway. WILLOW THRUSH. To the three records mentioned in my book (p. 258) may be added several others. Schorger (Trans. Wisc. Acad. Sci., Arts, and Letters, vol. 26, 1931, p. 39) found a nest of this bird in Bayfield County, Wisconsin, containing two eggs of the thrush and five of the cowbird. These constitute the first records for the Eastern Cowbird; the previous cases involved the Nevada Cowbird only. Mr. B. W. Cartwright found a nest of this thrush near Winnipeg, Manitoba, June 18, 1932, containing five cowbirds' eggs and one of the thrush. The cowbirds' eggs were laid by two different individuals, judging by their size and coloration. Mr. E. M. Tait found a parasitized nest at Trout Creek Point, British Columbia.

Sialia sialis sialis (Linnaeus). EASTERN BLUEBIRD. Seven additional records have come to my notice, ranging from Rhode Island to Oklahoma. Although the bluebird is still to be considered a rather infrequent victim of the cowbird, it is by far the most often parasitized of hole-nesting birds.

Polioptila melanura melanura Lawrence. PLUMBEOUS GNAT-CATCHER. Another record of this little known victim has been brought to my notice, a set of one egg of the host and two of the Dwarf Cowbird, found by Clyde L. Field, at Calixico, California, April 18, 1916. Still others—two sets from Santa Eulalia, Chihuahua, and Guaymas, Sonora, Mexico (G. Bancroft).

Polioptila melanura californica Brewster. BLACK-TAILED GNAT-CATCHER. Previously known from one record, two more may be added now. Mr. Clyde L. Field found a parasitized nest at National City, California, April 24, 1929, and Mr. N. K. Carpenter found a similar nest in San Diego County, California.

Corthylio calendula calendula (Linnaeus). EASTERN RUBY-CROWNED KINGLET. Previously recorded a single time as a victim of the Eastern Cowbird, this kinglet is now known to serve as a host of the Nevada Cowbird as well. Mr. A. D. Henderson found a parasitized nest near Belvedere, Alberta.

Bombycilla cedrorum Vieillot. CEDAR WAXWING. Previously I had but one record of this form as a victim of the Nevada Cowbird.

A second one, a parasitized nest found in Alberta by Mr. T. E. Randall, has now come to my notice; and a third, a similar nest found at Trout Creek Point, British Columbia, by Mr. E. M. Tait.

Sturnus vulgaris vulgaris (Linnaeus). STARLING. One record. Mr. E. J. Court informs me that Mr. A. H. Hardisty found a cowbird's egg in a nest with eggs of the Starling near Beltsville, Maryland.

Vireo atricapillus (Woodhouse). BLACK-CAPPED VIREO. Previously recorded but once as a victim of the Eastern Cowbird (and several times as a host of the Dwarf Cowbird), this vireo is known to be occasionally victimized by *M. ater ater* in Oklahoma, according to Mrs. Nice (Birds of Oklahoma, revised ed., 1931, p. 150), who lists three instances.

Vireo griseus griseus (Boddaert). WHITE-EYED VIREO. Mr. S. J. Darcus found two parasitized nests at Fredericton, New Brunswick, in May, 1909, and 1910. These are of interest because of the far northeastern locality.

Vireo huttoni huttoni Cassin. HUTTON'S VIREO. To the few previously listed instances may be added two more records, a nest with four eggs of the vireo and one of the Dwarf Cowbird, and a nest containing one large young cowbird, both found by Mr. H. W. Carriger near Oakland, California.

Vireo belli arizonae Ridgway. ARIZONA VIREO. This subspecies is now officially recognized in the last edition of the A. O. U. Check-List (p. 276). In my book (p. 238) I wrote that the Arizona records there given would have to be referred to this race if it should be considered valid. Two additional records have come to my notice, a parasitized nest found near Tucson, Arizona, by Mr. N. K. Carpenter, and one found near Oracle, Arizona, by Mr. Clyde L. Field.

Vireo belli pusillus Coues. LEAST VIREO. To the little previously recorded by me may be added three parasitized nests found in Mission Valley, San Diego County, California, by Mr. C. H. Woodward and Mr. E. E. Sechrist, and another found by Mr. N. K. Carpenter, also in San Diego County. Mr. Carpenter writes that it is now difficult to find a nest of this bird without one or more eggs of the cowbird, although the parasite was unknown in San Diego County thirty years ago.

Vireo solitarius plumbeus Coues. PLUMBEOUS VIREO. A second record has come to my attention. Mr. Alex Walker found a nest with three eggs of the vireo and one of the Dwarf Cowbird at an elevation of 5100 feet in Montezuma Canyon, Huachuca Mountains, Arizona, June 15, 1932.

Vireo solitarius cassini Xantus. CASSIN'S VIREO. Mr. W. B. Sampson writes me that he found a nest of this bird with two eggs of the vireo and one of the Dwarf Cowbird, four miles east of Milton, San Joaquin County, California, May 30, 1932. This is the first record of this vireo as a cowbird host.

Vireo olivaceus (Linnaeus). RED-EYED VIREO. Mr. T. E. Randall found three victimized nests in Alberta. These are the first definite records for this species as a victim of the Nevada Cowbird known to me. Mr. S. J. Darcus found this vireo to be a host of the Eastern Cowbird at Fredericton, New Brunswick, close to the northern limit of the cowbird's range (two records).

Vireo philadelphicus (Cassin). PHILADELPHIA VIREO. Mr. T. E. Randall found a nest of this bird with a cowbird's egg in Alberta. It is the only record for this species.

Vireo gilvus swainsoni Baird. WESTERN WARBLING VIREO. A parasitized nest found in Alberta, by Mr. T. E. Randall, is the first definite record for this bird as a host of the Nevada Cowbird. Mr. E. M. Tait found three victimized nests at Trout Creek Point, British Columbia. Mr. H. W. Carriger writes me that he found a nest of this vireo with two eggs of the vireo and one of the Dwarf Cowbird near Oakland, California, June 2, 1929. This is the second record known to me of this vireo with Dwarf Cowbird eggs. A third is a parasitized nest found in San Diego County, California, May 26, 1921, now in Mr. G. Bancroft's collection.

Mniotilta varia (Linnaeus). BLACK AND WHITE WARBLER. Not previously known as a victim of the Nevada Cowbird. Mr. T. E. Randall found a parasitized nest in Alberta.

Vermivora peregrina (Wilson). TENNESSEE WARBLER. Mr. T. E. Randall collected a parasitized nest in Alberta. This is the first record for this warbler as a victim of the Nevada Cowbird. Previously it was known as a victim of the Eastern Cowbird on one record.

Vermivora ruficapilla ruficapilla (Wilson). NASHVILLE WARBLER. A sixth record has come to my attention, a set now in the U. S. National Museum, collected at Holland Patent, New York, June 2, 1888.

Compsothlypis americana americana (Linnaeus). PARULA WARBLER. Mr. H. P. Attwater collected a set of one egg of the warbler and one of the Dwarf Cowbird in Kerr County, Texas, May 10, 1895. This is the first record for this warbler as a host of the Dwarf Cowbird. This set is now in the U. S. National Museum.

Compsothlypis americana pusilla (Wilson). NORTHERN PARULA WARBLER. To the few previous records from New York, New Jersey,

Connecticut, and Pennsylvania, may be added two others, from Oklahoma, recorded by Mrs. Nice (Birds of Oklahoma, revised edition, 1931, p. 157).

Dendroica aestiva aestiva (Gmelin). EASTERN YELLOW WARBLER. This is reported to be a very common victim of the Nevada Cowbird in Alberta by Rowan and Randall (in litt.) and in British Columbia by Tait and Darcus. If the western form of the Yellow Warbler (*D. a. morcomi*) is recognized in the future, these records will have to be considered as of that race.

Dendroica aestiva brewsteri Grinnell. CALIFORNIA YELLOW WARBLER. One additional record, a set found in San Diego County, California, by Mr. N. K. Carpenter.

Dendroica caerulescens caerulescens (Gmelin). BLACK-THROATED BLUE WARBLER. The late Dr. W. L. Ralph collected three parasitized sets of this warbler in New York State. They are now in the U. S. National Museum. These bring the total number of records up to six.

Dendroica coronata (Linnaeus). MYRTLE WARBLER. Besides the two definite records previously listed, a third one has come to my notice. C. H. Morrell collected a set of one egg of the warbler and three eggs of the cowbird at Pittsfield, Maine, May 26, 1891. This set is now in the U. S. National Museum.

Dendroica cerulea (Wilson). CERULEAN WARBLER. Previously I knew of seven cases of parasitism of this warbler. To these may be added two more, as follows: a set of two eggs of the warbler and two of the cowbird collected at Saginaw, Michigan, June 23, 1900, by R. A. Brown; and a set of three eggs of the warbler and one of the cowbird, taken in Beaver County, Pennsylvania, by W. E. C. Todd. Both sets are in the U. S. National Museum.

Dendroica auduboni auduboni (Townsend). AUDUBON'S WARBLER. Mr. E. M. Tait found this warbler to be parasitized by the Nevada Cowbird at Trout Creek Point, British Columbia. It is the first record for the species.

Dendroica discolor discolor (Vieillot). PRAIRIE WARBLER. This is one of those cases where recorded literature is misleading. In my book (p. 246) on the basis of published data, I wrote that this warbler is a very uncommon victim of the Eastern Cowbird. However, correspondence and conversation with several experienced and reliable egg collectors indicate that in localities where the warbler occurs it is a very frequently parasitized species. It has been recorded as a molothrine victim west as far as Arkansas (my previous data were all from the eastern seaboard states).

[To be continued]